



## Ludington Harbor, MI

### Project Features

- Located on the east shore of Lake Michigan, 156 miles northeast of Chicago, IL and 67 miles north of Grand Haven, MI.
- Authorization: River & Harbor Acts of 2 Mar 1867, 3 Mar 1899, 2 Mar 1907, 31 Dec 1970
- Deep draft commercial harbor
- Project depth of 27 to 30 feet in the entrance channel and 18 feet deep in the basins
- 401K tons of material shipped and received in 2013
- Over 8,700 feet of structures including breakwaters, piers and revetments
- Over one mile of navigation channel
- Major stakeholders include U.S. Coast Guard, Dow Chemical, Lake Michigan Car Ferry service (Badger), Pere Marquette Shipping, Reith and Riley Asphalt, and multiple charter boat fishing interests.

### Project Requirements

- Approximately 56,000 to 75,000 cubic yards of material must be dredged on a 2 to 3 year cycle; the harbor was last dredged in 2011.
- There are plans to dredge the harbor in 2016.
- South breakwater head requires repairs, which are planned in 2016. Failure of the nose and head would threaten navigation. The south breakwater was further damaged by significant wave action associated with a major storm that impacted southern Lake Michigan on October 31, 2014. Sustained winds of 50-60 mph and waves near 30 feet accelerated the deterioration on the breakwater to the point where significant repairs are needed to reduce risks to commercial navigation.



### Consequences of Not Maintaining the Project

- Light loading; loss of between 2 and 3 feet of channel depth results in increased transportation costs of between \$350K and \$660K annually.
- Reduction of bulk commodities that pass through the harbor that generate \$753M annually in business revenue while supporting 3,755 direct, indirect, and induced jobs that produce over \$49M per year in personal income in the transportation and commodity related industries.
- If the harbor were closed to commercial traffic, commodities would have to be transported by truck. This would increase annual emission rates by over 25M lbs of harmful particulate matter (PM-10) and increase costs by \$4.8M due to increased trucking related accidents.

### Transportation Importance

- The U.S Coast Guard Station Ludington resides within the harbor.
- Regionally significant receiving port on the Great Lakes and Harbor of Refuge
- Home port to S.S. Badger ferry that maintains cross-Lake Michigan service. Since 1992 the Badger has carried 120,000 passengers, 30,000 passenger vehicles and 11,000 commercial trucks.

**Transportation Importance Cont.**

- Commodities received include limestone, sand and gravel, slag, as well as salts.
- Many recreational users reside within the municipal marina and utilize the boat launch on a daily basis. The municipal marina services approximately 1,100 transient boats per year.

**U.S. Army Corps of Engineers Fiscal Year (FY) 2015, 2016 and 2017  
Ludington Harbor, MI - Project Requirements and President's Budget (\$1,000)**

<b>Work Package</b>	<b>FY15 Requirement</b>	<b>FY15 Appropriation</b>	<b>FY16 Requirement</b>	<b>FY16 Appropriation</b>	<b>FY17 Requirement</b>	<b>FY17 President's Budget</b>
Maintenance Dredging – Primary Work Package	590		590	590	0	
South Breakwater Head Repair by Contract	750		750	750		
Sediment Budget Analysis – Section 111	150		150		150	
<b>TOTAL</b>	<b>1,490</b>	<b>0</b>	<b>1,490</b>	<b>1,340</b>	<b>150</b>	<b>0</b>

**Congressional Interests**

- Representative Bill Huizenga R-MI-2
- Senator Gary Peters D-MI
- Senator Debbie Stabenow D-MI